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BS News

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BSNews

MECHANICAL & ELECTRICAL BUILDING SERVICES

MARCH 2004

DOMESTIC BOILERS

HARNESSING RAW ENERGY WITHOUT
DAMAGING THE ENVIRONMENT

smartfit

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Honeywell

50

years
of innovation in Europe

...to an age old problem

CENTRAL HEATING CONTROLS INSTALLATION HAS NEVER BEEN AS FAST OR AS EASY AS THIS

The new Smartfit systems from Honeywell overcome the traditional installation problems by using a combination of low voltage wiring and simple plug-in connections.

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Or call FREE on 0800 521121 Ext 2000.

FITTING AND PROGRAMMING IS AS EASY AS THIS

1. Install the base unit
2. Snap on the valve power head and plug in
3. Attach the cylinder sensor and plug in
4. Connect the low voltage room unit and switch on
5. Set the programmes for heating and hot water and
5. the Smartfit system is up and running

IT COULDN'T BE QUICKER OR EASIER!



"Energy Efficiency is an initiative backed by the Government."

The Energy Efficiency Hotline 0345 277200

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Honeywell

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READERSHIP DATA

BSNews (formerly Irish Building Services News) is Ireland's only dedicated Building Services magazine providing coverage of heating, ventilating, air conditioning, refrigeration, sanitaryware, plumbing, maintenance, energy and environmental industries. It is the only publication catering exclusively for these industries and its circulation includes members of the following:-

Chartered Institution of Building Services Engineers (CIBSE); The Mechanical Engineering & Building Services Contractors' Association (MIEBSCA); The Association of Consulting Engineers of Ireland (ACEI); The Mechanical Engineering Contractors' Association; The Institute of Domestic Heating Engineers (IDHE); The Institute of Plumbing; The Register of Environmental & Gas Installers of Ireland (REGII); The Irish Home Builders Association (IHBA); Builders Merchants/Trade Supply Outlets; Irish Property & Facilities Managers Association.

In addition, BSNews circulates to independent building services contractors and key executives in industry. Government, Semi-State and local authority bodies. Essentially, our circulation is virtually saturation coverage of all those with an interest and/or involvement in the building services industry.

OPINION

Put the Energy Show Dates in Your Diary Now!!

Faced with major environmental challenges globally, Ireland has to shoulder its share of the burden for reducing harmful emissions and encouraging changes in energy usage patterns. The proposed carbon tax also presents challenges of its own.

Against this background the forthcoming Energy Show 2004, which is organised by the SEI, is a timely event. It is the perfect forum for product suppliers and energy specifiers and users to come together to share opinions, knowledge and ideas.

Moving towards a lower carbon economy effectively means reducing our overall energy demand through energy efficiency measures and using renewable, non-fossil-based resources. The combined exhibition and workshop format of the Energy Show 2004 is an excellent way of spreading the word and achieving the necessary mindset change.

Put the dates in your diary now and visit www.sei.ie/workshops to pre-book the sessions that are of most interest to you.

Dates: Wednesday, 12 May and Thursday, 13 May, 2004

Venue: Industries Hall, RDS

IN THIS ISSUE

Trade News & Product Information	2
CIBSE News	14
Electrical Services Engineering	16
Domestic Boilers & Burners	18
IDHE Fellowship & Student Awards	25
REGII — Setting Installation Standards	26
Mandatory Registration of Domestic Installers	27
Property & Facilities Management	28
Refrigeration — Pressure Equipment Directive Implications	30
Not Just A Solar Pipe Dream!	31
Plumb Lines	32

'Massage Pressure' Pumps Up Profits

Given the fact that property values simply cannot continue to grow at the extraordinary rates of recent years, people are looking to upgrade their own homes rather than moving. It is becoming more difficult to move as it is getting harder and harder to realise sufficient funds to trade up.

Nonetheless, peoples' expectations are still growing and the level of comfort and convenience that is expected from all the "taken-for-granted" services within a modern home has increased dramatically. Consequently, refurbishment and upgrades to existing homes offers tremendous potential for the building services sector.

Take for instance pressurised systems. Greater affluence has meant that people will have experienced the benefits of these systems when staying in hotels, or visiting their local leisure centre or gym. They now want the same thing at home, thereby making it a far easier "sell-up" for installers.

So, in advising on refurbishment or upgrading, one of the first things that can be done is to change the existing open vent system for an unvented pressurised system. How many homes do installers enter where they are asked can they do

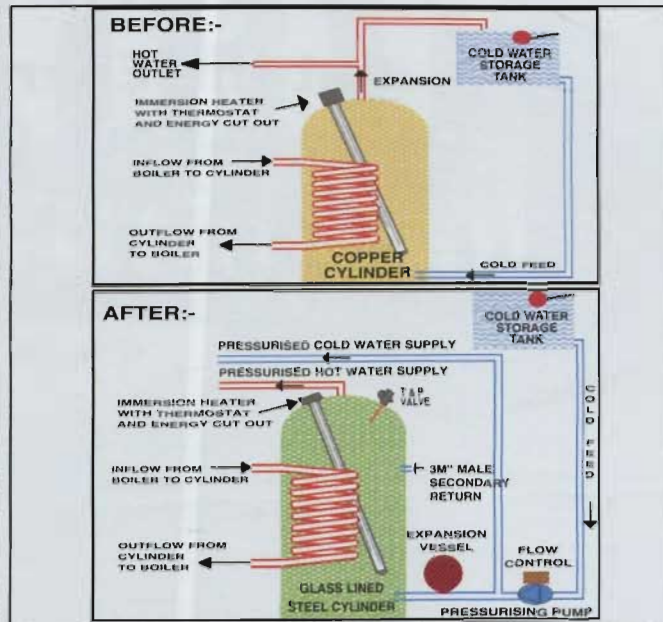


Figure 1 — It is simple and easy to replace an existing hot and cold domestic water system with a Lycris-Byrne glass lined steel hot water storage cylinder and fully automatic stainless steel pressurising pump. This system eliminates the need for electrical power showers and the system can be expanded at a later stage (another bathroom) without any further changes to the pump or cylinder, as both hot and cold water are permanently pressurised. The changeover from a flow to a pressurised flow can be achieved in less than a day. These cylinders can be used in place of the traditional copper hot water cylinder, using standard BSP connections. See diagrams above.

anything about the pressure in the shower? The technology to solve this problem is already widely-used and established throughout Europe, and has also permeated the top-of-the-range homes sold here in Ireland.

"It is now set to become commonplace in all homes in this country", according to Chris Byrne of Lycris-Byrne who has spent the last decade pioneering and perfecting unvented pressurised systems. The simplicity of the changeover is shown in the "before" and "after" Lycris-Byrne schematics illustrated in **Figure 1 (above)**. It is simply a matter of connecting the Lycris-Byrne high-pressure pumped system into existing

water connections. An alternative is to move the hot water system to another location as it is no longer imperative to have the unit where gravity can feed all the sanitary ware. The pump can take the water from any location in which you have the cylinder. A second major advantage of this system is that the pump only pumps cold water and this leads to a longer pump life.

"So", says Byrne, "when you want that 'massage pressure' shower to pump new life into your customers' lives — and your profits — you now know who to contact."

Contact: Chris Byrne,
Lycris-Byrne.
Tel: 01- 286 3794;
email:
info@lycristbyrne.com

Efficient Boilerhouse Management

Boilers are a feature of everyday industrial, commercial and residential life in Ireland. In an average year these sectors consume 1,815 million litres of fuel oil and 10.4 billion kWhs of gas.

When it comes to industrial and commercial boilers in particular, the potential for fuel cost savings in boiler plant is enormous. Increased awareness and improved housekeeping practices are the principal means by which savings can be realised. The average boiler plant operates at between 10% and 20% below optimum efficiency, thereby wasting significant amounts of energy and money.

Against this backdrop Sustainable Energy Ireland has organised a series of 2-day workshops on boilerhouse management, the first took place this month while the next is scheduled for 21/22 September next.

Contact: Deirdre Farrelly, SEI.
Tel: 01 - 836 9080

The **New** **R410a** Small Solution

The new small solution from Sanyo – all the quality, flexibility and power you expect from Sanyo technology in a compact and affordable package. The new SAP wall mounted R410a unit is the ideal solution for domestic and small commercial air conditioning applications.



Whether you prefer the latest in DC inverter technology with COPs of 3.6 or the non-inverter alternative with an even greater price benefit, Sanyo offers you real choice at a really exceptional price.

- 2 Inverter heat pump models – 2.65kW and 3.5kW capacities
- 6 Non-inverter models – cooling only 2.4Kw, 2.65kW, 3.72kW and heat pump 2.40kW, 2.78kW, 3.55kW capacities.
- Attractive modern appearance
- High power and Quiet mode
- Sleek multi functional Infrared Remote controller with Built-in sensor



With Sanyo continuing to offer a full range of R407c systems, 2004 continues to be the year of choice.

Sanyo Air Conditioners

41 Western Parkway Business Ctr, Ballymount Road, Dublin 12. T: 01 456 8910 F: 01 450 7227

www.sanyoaircon.com

Increased Range of Models From Mitsubishi Heavy Industries

Michael Clancy of 3D Air Sales Ireland has announced details of a whole new series of additions to the Mitsubishi Heavy Industries range for the coming year. These products have been developed to meet the changing market requirements with a view to increasing COP heating and cooling performance using R410A; extending to lower and higher capacities than before; incorporating lower sound levels into all models; and the use of enhanced controls.

BSNews will carry full information on each of these product developments as they come on stream but, for the moment, brief details of some are as follows:—

P FDT Cassette — This is a completely new design with much lower sound levels. The corner of the panel is removable to allow final levelling of the unit against the suspended ceiling. There is a compact 3.5kW model and a large capacity 14.5kW unit. There is also a new optional wireless control kit;

P FDK Wall Mount — New design with wired controller; compatible with FD multi systems;

P FDE Ceiling Mount — New design with wired controller; compatible with FD multi systems;

P SRK — New wall split systems, some inverter, all with high COP, extended range;

All FD Series and SRK Series have COP in excess of 2.8 and are therefore in compliance with Enhanced Capital Allowance requirements;

P Compact 14kW Inverter —

FDCA140HEN (single phase) and HES (three phase), high COP;

P KX Outdoor Units 224 and 280 — R410A, low noise, with DC inverter compressors, COP of 3.4. Area of heat exchanger is increased by 60% for high performance at low ambient conditions. Upgraded "Superlunk" network5k control system has many new features;

P Indoor units — Complete new designs, similar to split systems (above);

P Controls — New remote control includes 7-day, 24-hour programmable control; data save function to store error code history; record of hours run; temperature sensor included as an alternative to unit return air sensor; group control facility.

Contact: Michael Clancy, 3D Air Sales Ireland.

Tel: 01 - 462 7570;

email:

micclan1@eircom.net

Electric Space Heaters

Thermelec Ltd has introduced a new range of fixed and portable electric space heaters. Manufactured in Spain, these units are available from 4kW to 18kW, and are suitable for use in enclosed areas such as workshops, showrooms, and small storage rooms.

The RMO range is designed for fixed mounting to ceilings or walls, with 360° vertical adjustment. All models contain an integral safety thermostat, and most models also contain a room temperature sensor. These units are supplied with a junction box for direct wiring.

The ANB range is designed for portable use, but can also be fixed mounted, using the available mounting bracket, providing 180° horizontal adjustment. These units are supplied with a CETAC 5-pole connector. All are available ex-stock with special nett prices for contractors or trade customers.

Thermelec also distributes the Ambi-Rad range of gas-fired radiant heaters and the Heatmiser range of heating control panels.

Contact: Michael O'Reilly, Thermelec.

Tel: 01 - 456 8111; email: sales@thermelec.ie.



From the new range of fixed and portable electric space heaters from Thermelec

Training in Boiler Technology

Potterton Myson Ireland hosts an ongoing series of training seminars on the Potterton range of boilers at its purpose-designed training centre located in its Belgard Road, Dublin 24 headquarters.

The purpose is to further promote excellence in the boiler industry through education and hands-on,

practical, demonstrations. However, all participants are expected to have already achieved minimum standards on gas safety and installation.

If interested in participating in a forthcoming seminar, contact: Potterton Myson Ireland, Tel: 01 - 459 0870.

3D Air Sales (Ireland) Ltd,
Unit 8, Greenhills Business Centre,
Greenhills Industrial Estate, Tallaght, Dublin 24.

Tel: 01 - 462 7570 Fax: 01 - 462 7611

email: micclan1@eircom.net www.3dair.co.uk



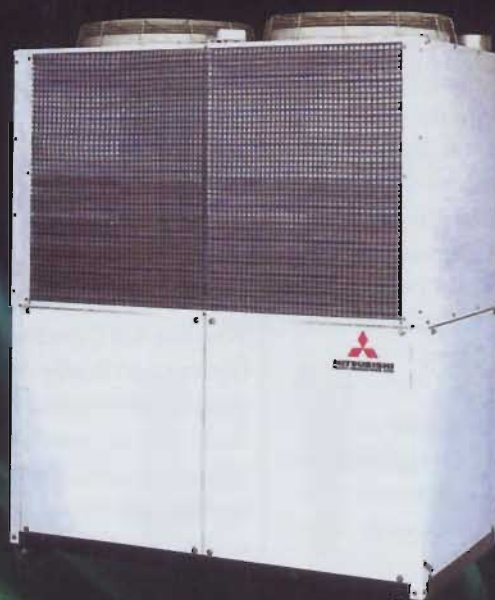
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OF THE YEAR 2003

www.3dair.co.uk

GHP

Gas Engine Powered VRF Systems

Variable Capacity Cooling / Heat Pump Systems



VRF (variable refrigerant flow) systems are normally powered by electric driven compressors with an INVERTER for variable speed control.

The GHP is a VRF system, which has the compressor powered by an engine using natural gas as the input fuel.

This means that large cooling / heating systems can be installed in buildings which have a limited electricity supply. The GHP requires some electrical power for the fans and controls, but this is minimal compared to the power requirements of a conventional VRF, Chiller, or other type of system.

In winter, the heating performance is maintained in very cold ambient conditions, because the waste heat from the engine is utilised as a secondary heat source to enhance the output of the heat pump.

**3D AIR SALES Ltd - Distributors of MITSUBISHI Split Systems,
VRF Systems, and GHP in the UK and Republic of Ireland.**

Published by ARROW@TUJ Dublin, 2004



Engineers Help Third World

The Institution of Engineers of Ireland and a number of leading engineering companies have agreed a Developing World Protocol to assist in Third World development. Under the Protocol, they will provide a range of practical services and incentives to engineers working for Non-Government Organisations (NGOs) in Ireland and abroad.

Under the plan, the IEI and the companies that are signatories to the Protocol will provide a range of practical services to NGOs.

Delivering Sustainable & Intelligent Housing

"Living the Dream — Delivering Sustainable and Intelligent Housing in Ireland", is the theme of a conference to be presented by INTERGER Intelligent and Green at Chief O'Neill's Hotel, Smithfield, Dublin 7, on Thursday, 1 April next. The conference will explore how the application of environmental and intelligent technologies can produce better building performance and quality in social and affordable housing, as well as for commercial housing developments.

INTEGER is an action research programme aiming to deliver better performance and value in mainstream housing. Formed in 1996, it has since developed, demonstrated and implemented a wide-ranging agenda for innovation in the housing field.

Cost of participation is €120 per delegate.
Contact: Richard Webb, INTERGER.
Tel: 01-286 6991; email: rwebb@indigo.ie

Carrier Fan Coil Catalogue

Copies of the new dedicated Carrier fan coil catalogue are now available from Core Air Conditioning. The 28-page, full-colour publication contains details of Carrier's extensive fan coil range and illustrates how the units match up with Carrier chillers.

Contact: Austin McDermot, Core Air Conditioning.
Tel: 01 - 409 8912; email: info@coreac.com



One of the complete range of Carrier fan coil units illustrated with full specifications in the new Carrier fan coil catalogue available from Core Air Conditioning



Toshiba's Olympic Winner

Two hundred Toshiba Air Conditioning residential multi-split inverter systems will provide vital cooling for the journalists from all over the world who will stay in the Athens media village while covering the 2004 Olympics.

The systems will provide respite from the Greek sun for everyone living in the Press Village buildings, which will be subsequently become the National Police Academy. The energy-efficient, inverter-based, R410a Toshiba Air Conditioning systems were designed in Japan specifically for domestic applications and are proving increasingly popular across Europe in the wake of last year's heatwave summer. In the Press Village chalets the two hundred multi-split outdoor units will be connected to six hundred hi-wall indoor units.

Toshiba Air Conditioning also beat the competition to a contract for cooling the new Faliro Olympic Sports Pavilion used for taekwondo and handball this summer. The building is almost complete and the installation is currently being commissioned.

This eight thousand seat, 81,000 sqm martial arts stadium has seven Toshiba modular multi system (MMS) outdoor units and thirty ducted indoor units to keep the spectators comfortable as the competition heats up.

Contact: Derek Phelan, GT Phelan.
Tel: 01 - 286 4377; email: gtphelan@eircom.net

Property Care Seminar

Property care company Protim Services will host an open seminar at 9.30am on Tuesday, 27 April, in the Industry Centre at UCD, Belfield.

A team of experts from the Property Care Association (UK) will explore and discuss damp-proofing, basement waterproofing, and dry rot.

Contact: John McCartie, Protim Services.
Tel: 01 - 830 5966.



Safeguard Systems

THE DAMPER SPECIALIST COMPANY

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Johnson
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Satchwell
UNV-023

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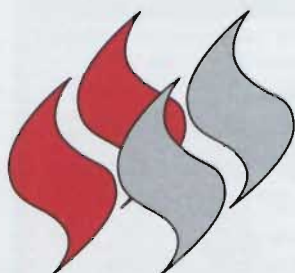


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- **Ruskin** High integrity dampers



Safeguard Systems

THE DAMPER SPECIALIST COMPANY

Systems House, Unit 34, Southern Cross Business Park, Bray, Co. Wicklow

T: +353 1 2761600 F: +353 1 2761611 E: info@safeguard.ie W: www.safeguard.ie

Published by ABOW@TU Dublin, 2004

Mark Eire has embarked on a major expansion programme which includes the erection of a new factory, installation of new, state-of-the-art manufacturing equipment, and the implementation of new management procedures which will entail manufacturing certain product lines for stock.

The €2 million programme is already underway and, when completed, will see combined production, office and warehousing facilities all housed within a covered complex standing on 60,000 sq ft.

Investment in research and development has also increased, fully-qualified graduates now working on various projects which will gradually come to the marketplace over the coming months and years. Particular emphasis is being focussed on life-cycle costs and eco-friendly features, especially in view of the imminent introduction of carbon taxes.

Mark Eire €2 Million Expansion Programme



Mark Eire's new gas-fired wall and ceiling heaters, and wall and ceiling LPHW fan coils, are now available

"We're very excited about this new programme", says Mark Eire's Mike O'Donoghue. "It reflects an optimism and confidence within the company which translates into excellent work practices and commitment on the part of every single employee. This in turn makes for the perfect quality control environment, thereby ensuring that the various products coming off the production line give optimum, trouble-free, performance."

"The traditional marketplace for our product portfolio has changed enormously in recent years, driven by greater expectations on

the part of clients and also the need for compliance with new statutory requirements in respect of energy performance and other eco-related issues. We have the advantage of total control in that we have a highly-qualified and experienced R&D team; we manage all our own materials sourcing; have excellent test facilities; and a workforce of long-standing whose combined experience of the industry is a massive resource."

With controls and product interface within building services now so important, Mark Eire designs and manufactures all its own

control panels. These units can be customised depending on the product/system application with Mark Eire personnel overseeing the installation and commissioning.

Mark Eire's product portfolio is extensive and includes cabinet heaters; gas-fired wall and ceiling heaters; wall and ceiling LPH fan coils; unit air heaters; gas-fired make-up air units; gas-fired black tube radiant heating; water radiant panels; warm water unit air heaters; air handling units; roof fans; industrial burner installations; destratification units; and hydraulic pipe-bending machines.

Over the coming months *BSNews* will feature selected products from the Mark Eire range, concentrating on new and innovative products as they are introduced to the marketplace.

Contact: Mike O'Donoghue, Mark Eire.
Tel: 026 - 45334;
email: sales@markeire.com

Crystal Air Recognised in Japan

Crystal Air directors Domnick Ward and David O'Brien were taken by surprise on their recent visit to the Sanyo factory in Tokyo when they were presented with a commemorative certificate to mark Crystal Air being the first contractor in Europe to install and commission over 100 R407c 3-way Eco Multi systems (simultaneous heating and cooling VRF).

Mr Ashizawa, Overseas Sales Manager for Sanyo, said it was all the more a remarkable

achievement because, compared with other marketplaces such as the UK and Spain, the Irish market is still only developing. Nonetheless, Crystal Air were the first to pass the 100 system mark, a number which they have since left well behind them.

"This really was the icing on the cake for us", said Crystal Air Director Domnick Ward.

"The trip was fantastic and we had the opportunity to view some of the new



Domnick Ward with Mr Ashizawa, Overseas Sales Manager for Sanyo and David O'Brien following the presentation in Tokyo recently

products that will soon be with us. We are especially excited about the imminent arrival of the 3-way GHP system. To think that we will be able to offer 56kW of simultaneous heating

and cooling VRF with just a small single-phase supply and natural gas or LPG is mind-blowing".

Contact: Domnick Ward, Crystal Air.
Tel: 01 - 045 893228;
email: info@crystalair.ie

CATA Appoints Mech-Elec for All Ireland

CATA — the world-renowned Spanish fan manufacturer — has appointed Mech-Elec distributor for its vast range of ventilation products for the entire island of Ireland. As we went to press *BSNews* spoke with Niall Cleary, Managing Director of Mech-Elec, who told us:—

"Mech-Elec at last have secured from CATA the exclusive distributorship for their ventilation products on the whole island of Ireland. This we feel is a bit of a coup as they were under severe pressure from UK manufacturers for whom they brand material, not to concede this. Our growth in sales of their products, however, is matched only by the monotonous

reliability across their range of fans.

"But there was a price to be paid, however. That is, we had to effectively abandon our UK suppliers of many years. But life goes on, and reliability is worth a great deal in the building services industry. Ask any contractor who has had to repeatedly return to site because of defective fans.

"It is interesting that across the board within our industry the umbilical cord has finally been cut. By this I mean for years most material coming into this country for the ventilation industry came from Britain, either direct from manufacturers or filtered through them from further afield.

"I expect the gradual development of trade



The CATA X-Mart ventilation fan from Mech-Elec has a unique stainless steel front which can be easily removed for thorough cleaning

within the EU has made for greater choice becoming available. CATA is becoming known here only in the last number of years, and yet they have for perhaps decades sold more fans worldwide than any other fan manufacturer. They make and brand product for a large number of reputable

names.

"There is more to come. Three new products have been launched in the last 12 months alone. Watch this space".

Contact: Niall Cleary, Mech-Elec Distribution.
Tel: 01 - 450 8822;
email: niall@mech-elec.ie

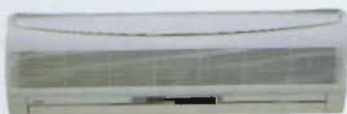
TOSHIBA

At last. An air conditioner that actually improves the condition of the air.

Discover the future of air conditioning: Toshiba's superior inverter splits

Toshiba's Daiseikai DC hybrid inverter systems are quite simply unrivalled. When you need a system that is unbeatable for energy efficiency, temperature stability and air quality, nothing even comes close. The Daiseikai incorporates an air ioniser and delivers 20% increase in EER compared to conventional inverter models. A triple-action filtering system makes it the perfect solution for specialist applications such as dental, doctors' and veterinary surgeries. In fact any small commercial or residential application, where air quality and the fast removal of bacteria, dust and odours are essential.

Daiseikai is just one example of the Toshiba R410A inverter splits on offer. Also new for 2004 are the Super Digital Inverters, offering high performance and a choice of new, sleek indoor models, including cassettes, ducted and wall-mounted models.



DAISEIKAI
PURE COMFORT

 **GT PHELAN**

GT Phelan Ltd, Unit 30, Southern Cross Business Park, Bray, Co. Wicklow
Tel: 01-286 4377 Fax: 01-286 4310
email: gtphelelan@eircom.net Web: www.gtphelelan.ie

Sanyo Have It Large



The choice of Sanyo for the latest development by Danninger Ltd in Dublin — Chapel House, the 110,00 sq ft office development in Parnell Street — confirms Sanyo's status as one of the premier ac suppliers in Ireland.

This is one of the largest single-project

installations of VRF in the country and David O'Brien, Director of Crystal Air, the Sanyo dealer responsible for the installation, explains why Sanyo was chosen. "There were a number of different reasons. A project of this size demands the highest levels of reliability. Not

only that ... the running costs and overall efficiency on a long-term basis must also be taken into account. Sanyo won out on both counts."

The development covers five floors of fully air conditioned premium office space, the system comprising a total of 61 Sanyo ECO Multi R407c VRF condensing units totalling over 1700 kW, all of which were sited on the roof. Crystal Air worked closely with Sanyo to ensure trouble-free installation.

"It was remarkable to undertake a project of this magnitude which, once installed, took only the press of the auto address button and the system does the rest. It is like 'auto-pilot' for engineers," said David O'Brien, Director of Crystal Air.

The indoor units applied were Sanyo ducted units which come complete with discharge spigots and condensate lift pumps, therefore saving considerable time and money on installation and accessories.

"The Chapel House development is a great example of the excellent teamwork between ourselves and Crystal Air", said Sanyo's National Sales Manager, Barry Hennessy. "In fact, the winning of projects on this scale just goes to show the impact of our commitment to the Irish market, and our relationship with all our dealers."

Contact: Barry Hennessy, Sanyo Air Conditioners.
Tel: 01 - 456 8910;
web: www.sanyoaircon.com

Cork Contractors Join Register Initiative

Further to our many editorials in recent issues *vis a vis* the imminent introduction of a Register of Gas Installers, the Alliance of Plumbing & Heating Contractors in Cork has come out strongly in favour of the initiative. Indeed, when he was Chairman a number of years ago Pat Kelleher, along with Barry Philpott, argued that the only way forward for the business was an orderly, properly-regulated, industry. Since then they have both worked tirelessly towards realising such an objective.

Now in his role as the Alliance representative

on the Bord Gáis Review Committee for the region, Pat regularly comes up against the appalling consequences of the current so-called regulation system, and especially its inability to weed out unprofessional, unqualified and unscrupulous operators.

Pat attended the national contractors' representatives meeting in Kilkenny recently at which it was agreed that unified representation would be made to the relevant Government department, and the Commission for Energy Regulation (CER), on the matter. Positive feedback has already been

received from both the Department and the CER, and Pat will be part of a delegation meeting with the Commission for Energy Regulation, along with Kevin Farrelly of REGII (see page 26).

The Alliance of Plumbing & Heating Contractors in Cork has served domestic installers in the Munster region for many years. Current Chairman is Gary Tobin and he, along with Barry Philpott, Pat Kelleher and the other Committee members, put in a tremendous amount of time and effort in furthering the interests of the group.

Membership now stands at 65 and includes virtually all of the *bona fide* domestic heating and

plumbing contractors in the Munster region. General member meetings are held as and when the need arises with the Committee meeting on a more structured basis. They also continuously communicate with one another — and the membership — on a regular informal basis so that appropriate action can be taken in direct response to particular issues.

Additionally, there is a social programme, the highlight being the Annual Dinner and presentation of Merchant Awards. This year's event will be held in the Rochestown Lodge Hotel, Rochestown, Cork, on 2 December 2004.

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Short Outlet Centrifugal Fan

&

Modular Ducting Systems

Flat Pack Ducting



- Centrifugal fan;
- Backdraught grille system;
- High pressure. Ideal for long duct runs;
- 'Safety in mind' 12-volt version available.



CB 100T

Flush Version Centrifugal Fan



CB250

Big Brother Centrifugal Fan



SMT 100

Silent Inline Fans

Mech-Elec®

Distributors Ltd.

Head Office, B4 Calmount Business Park, Dublin 12

Tel: 01 - 450 8822

Fax: 01 - 450 8227

email: info@mech-elec.ie



Win a Sanyo Hi-fi Reader competition

Enter our reader competition and you could win a fantastic Hi-fi in our prize draw. Simply answer the questions and complete the details, copy and fax back to BSNews on 01 288 6966.



March 2004 competition

1) Which member of the winning Irish rugby team scored Ireland's only try in the 2004 Six Nations game against England in Twickenham?

- a) Brian O Driscoll ☐ b) Peter Stringer ☐
c) Girvan Dempsey ☐

2) Which Irish Golfer narrowly missed out on top prize in the Dubai Desert Classic this month, and ended up taking second place?

- a) Damian Mc Grane ☐ b) Paul Mc Ginley ☐
c) Pdraig Harrington ☐

3) What is the name of the major office development recently completed in Parnell Street, Dublin, using a Sanyo Eco Multi system throughout?

- a) Church House ☐ b) Chaperon House ☐
c) Chapel House ☐

4) What is the name of the singer who will represent Ireland in this years Eurovision Song Contest in Turkey?

- a) James Kilbane ☐ b) Chris Doran ☐
c) Bryan Mc Fadden ☐

5) Sanyo Air Conditioners have dubbed 2004 as the year of what?

- a) The Cat ☐ b) Choice ☐ c) Eco Multi ☐

Name: _____

Company: _____

Address: _____

Postcode: _____

Email: _____

Tel: _____

**Fax back to BSNews
on 01 288 6966**

Rules: Competition open to anyone over the age of 16.

Sponsored by
SANYO
AIR CONDITIONERS

Jobs Corner

ELECTRICAL SERVICES ENGINEERING

Consulting engineering firms and contractors seeking to employ successful electrical services engineering graduates should contact Kevin Kelly of DIT Kevin Street re the 24 Diploma students who will graduate from the full-time DT244 course this coming June.

Many of those on the K249 part-time equivalent electrical services engineering course — most of whom are qualified electricians — are also looking for employment. They will graduate in May 2005.

Contact: Kevin Kelly, Faculty of Engineering, Department of Electrical Services Engineering, Kevin St, DIT. Tel: 01 - 402 4771; email: kevin.kelly@dit.ie

CONTRACTS MANAGER

Glow Heating Ltd, a mechanical services specialist operating in the Irish market for over 30 years, is looking for an experienced individual to fill the position of Contracts Manager. The company's range of activities includes commercial, industrial and process installations in all areas of the mechanical services sector.

The successful candidate will be a team player keen to work in a dynamic environment. He/she must be able to work independently and have experience in project management, from commencement of a project through to completion.

Salary will be in line with experience. CVs to Glow Heating Ltd at info@glowheating.com; or Tel: 01 - 462 6556.

RADIATOR SALES AGENT

Autron Products Ltd — one of the UK's leading manufacturers of LST radiators — seeks a sales agent. Range includes domestic and light commercial systems. Plan is to expand sales into Ireland by targeting distributors, smaller contractors, consulting engineers, etc.

Contact: Trevor Burr / Richard Jacobs.
Tel: 0044 1787 473964 or email: sales@autron.co.uk

CALLING ALL EMPLOYERS

Employers, if you have a position to fill please email brief details to louise@pressline.ie for inclusion free of charge in BSNews Jobs Corner.

Free Admission Ticket Enclosed With This Issue of BSNews

For further information please contact:
Maxine at Phex. Tel: 0044 1977 612020.



PHEX

the Plumbing & Heating Exhibition

Systemair Kitchen Extract Fans

The area of kitchen ventilation has seen some major changes over the last number of years. Systemair has recognised this change and developed a comprehensive range of high-quality, long-life, kitchen extract fans to meet the following requirements:—

- Very low noise levels;
- Speed controllable;
- Fully cleanable;

- Direct-driven maintenance-free fans;
- Suitable for high temperatures up to 120°C;
- Both inline and roof-mounted versions available.

There are four primary series in the range:—
MUB K-type — Maximum airflow of 16,000m³/hr; KBT/KBR — Maximum Airflow 7,100m³/hr; DVN — Maximum Airflow 31,500m³/hr; and DVV — Maximum Airflow 45,000m³/hr.

The majority of these fans are available ex-stock Dublin and are available with a complete range of accessories such as speed controllers and attenuators.

Contact: Raymond Graham, Systemair.
Tel: 01 - 862 4544;
email: ragr@systemair.ie



Systemair DVV — Maximum Airflow 45,000m³/hr kitchen extract fan

Degree Status For Electrical Services Engineering

Following pioneering work in relation to the discipline of electrical services engineering, DIT Kevin Street — which already runs a diploma course on the subject — has now had the programme validated as being of degree status. The new title of the course is Bachelor of Technology Degree in Electrical Services Engineering. The Programme reference is FT 010. The standard is very similar to the Diploma but it has been re-designed to National Qualifications Authority of Ireland (NQAI) Level 7 which is Ordinary Degree standard.

Kevin O'Connell, Head of Department, Electrical Services Engineering, Kevin ST DIT, says: "We took the opportunity of converting it to a fully-modular format which should make it even more student-friendly. The entry requirements are very similar to the Diploma and access to the first year of the programme is available through the CAO system. Advanced level entry to years two and three is

available to those with Accredited Prior Learning and application may be made directly to the Department of Electrical Services Engineering, DIT Kevin Street (Tel: 01 - 402 4617).

The structure of the programme is 50% formative assessment (assignments/course work) and 50% traditional exams as with the Diploma. Formative assessment is when the main purpose of the assessment is to provide feedback to the student and assist in the learning process. It is ongoing throughout the year and also adds to end-of-year results.

The programme is also available in part-time mode to those employed in the electrical services industry. The part-time programme takes account of prior learning, work-based and experiential learning.

Contact: Department Secretary, Department of Electrical Services Engineering, Kevin St DIT.

Tel: 01 - 402 4617.

See also *Electrical Services Engineering Section*, page 16-17.

Hermann at PHEX

C&F Quadrant will introduce the Hermann range of quality gas boilers at the forthcoming Phex which is being held in Moran Red Cow Hotel, Dublin, from 7 to 8 April next.

Hermann is internationally renowned for the quality and reliability of its boilers which are exported from Pontenure in Italy to over 20 countries worldwide.

See them on the C&F Quadrant stand, No: 12/13 Stand executives are Tony Macken. Tel: 00353 86 2532997; and Cliff Brandt. Tel: 0044 77 11441586.

Dynamic Control of Vapour Compression Cycles

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In the past decade, considerable advances have been made in direct control of the vapour compression cycle in refrigeration and air-conditioning systems. However, owing to the proprietary nature of these developments, little information concerning the underlying algorithms has been published in the scientific literature, says Dr Donal Finn, Lecturer, Department of Mechanical Engineering, University College Dublin.

At a recent presentation to the Republic of Ireland CIBSE region, Dr Finn examined the potential for integrated control of the vapour compression cycle by means of Building Energy Management (BEM) systems, thereby extending the capabilities normally associated with BEM control. Although the number of controllable components in vapour compression systems are relatively few (compressor, evaporator, condenser and throttling valve), it is the dynamic interaction of these components that is both challenging and interesting.

In the lecture, issues pertaining to the design of algorithms for control of refrigerant expansion were examined by investigating key system parameters, including evaporator

superheat, set-point temperature, valve opening while observing system pull-down characteristics, steady state stability, and transient behaviour. A progressive examination of the response characteristics of a throttling device to optimisation subject to P, PI and PID control was considered.

Two alternative tuning mechanisms — the Ziegler Nichols approach and the lesser-known, although widely-utilised in HVAC system tuning, Becker approach — were compared. The algorithms are implemented by means of a well-known proprietary BEM system which is interfaced with a pulse-actuated refrigerant throttling valve. Performance of the prototype system is benchmarked against two reference throttling devices — a conventional thermostatic expansion valve and a commercial electronic expansion valve.

The presentation was such that it was of relevance to members from either an electrical or mechanical perspective who are interested in the application of BEM control to more complex engineering systems in building energy applications.

In all, 34 attendees were present on the night, which ensured a comprehensive

question and answer session after the presentation.

"Health & Safety — An Electrical Perspective" was the subject of the CIBSE technical evening a few weeks later. The purpose of this lecture was to stimulate discussion and promote awareness of

electrical safety.

The physiological effects of electricity on man versus magnitude/application period in relation to electrical shock, was also debated, as was the importance of time/current zones of effect with respect to disconnection times.



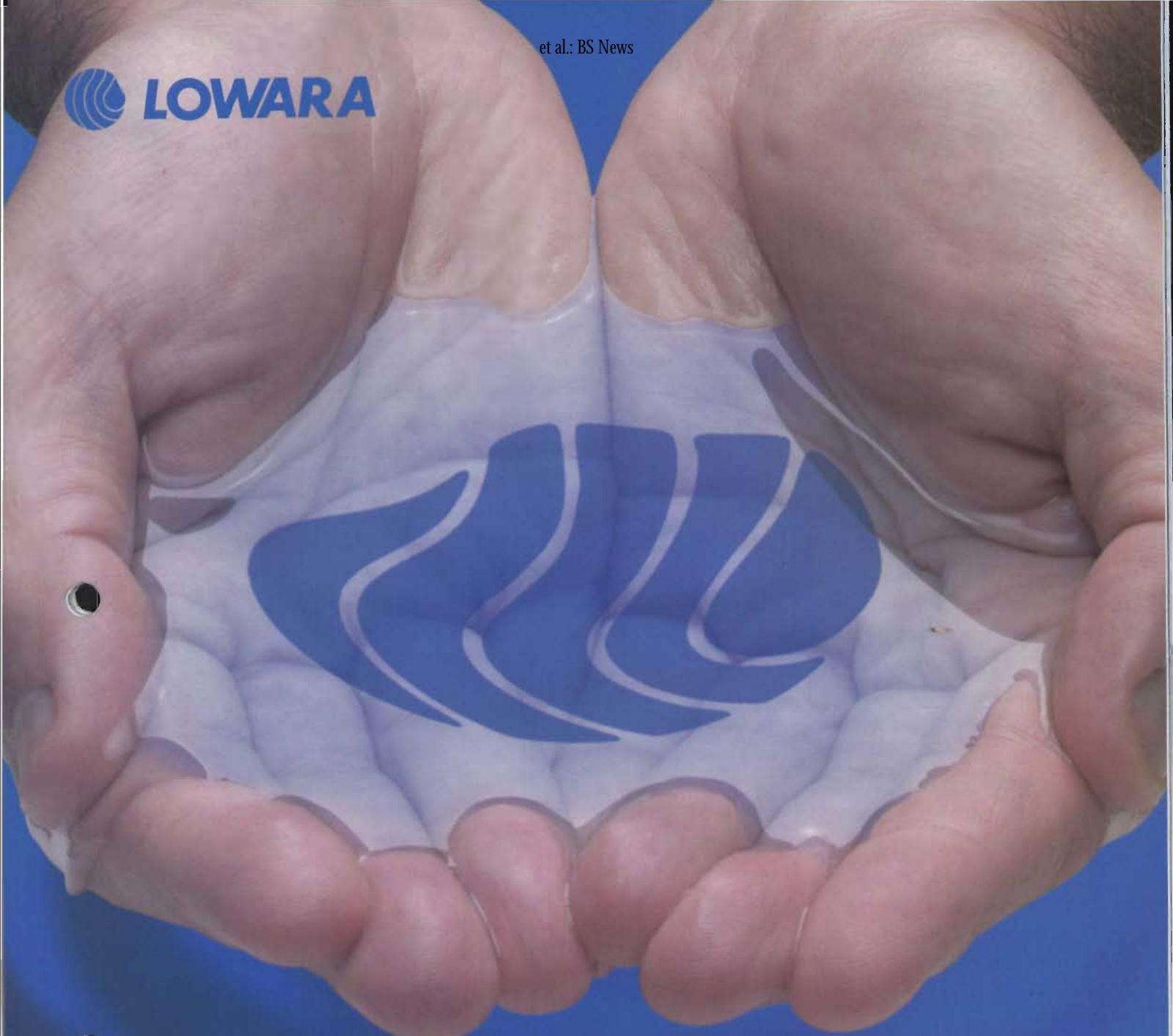
Health & Safety — An Electrical Perspective — Dick O'Rourke with Dr Michael Walsh, Chairman of IEE with Kevin Tracey, CIBSE Chairman



Dynamic Control of Vapour Compression Cycles — Don Byrne, DIT with Declan Monaghan



Dynamic Control of Vapour Compression Cycles — Michael Crowley, DIT with Kevin Tracey, CIBSE Chairman, Donal Finn and Ben Costelloe



**Working together Lowara & Vogel have
more innovation, strengths and support.
The future is in our hands**

Lowara and Vogel have combined forces, to share their resources and technical strengths to provide advanced and comprehensive solutions for all pumping problems.

This is the clever thing to do, as everyone knows in unity there is strength.





Thomas Nugent, DIT Kevin St. Email: thomas.nugent@dit.ie

Prophecy is Self Fulfilling — Start e-learning Now!

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You may recall that in my first article in *BSNews* January 2004 I prophesised: "In the near future you will be doing courses, learning and getting qualifications via the Internet". Well now is your opportunity for achieving two out of three, free of charge.

Sorry, but you will not be getting a qualification this time! My colleagues and I have prepared a sample e-learning course that you can access with a personal WebCT ID and password. This ensures they have a personal private record of your usage and the results of their tests. To receive your ID and password just email

pauline.rooney@dit.ie and she will return them post haste. Then by simply following the next five steps you will be e-learning.

- Log on to <http://webcourses.dit.ie>;
- When the page opens click on Log into myWebCT;

- When the next page opens fill in your WebCT ID;
- Fill in your password;
- When the WebCT course page opens click on any of the icons to access the component of your choice.

When the selected component opens you have reached the Promised Land and are ready to start e-learning. There are five components to this introductory course and you can access them in any order, as often as you wish, up to May Day 2004. We will then review your response and participation, to determine what the next step in the adventure will be. The five components are as follows:—

Introduction

This includes a word of welcome and an explanation of why I have chosen the SI system as the sample topic with a warning about betting on their accuracy.

SI Notes

SI Notes has some notes in Word document format that you can download for reading in bed.

SI Animations

SI Animations have animated PowerPoint presentations that you can click through to keep you awake at the monitor. If you can stand it and you have a sound card and speakers on your computer, you can also have my voiceover to accompany the PowerPoint. Alternatively, you can click on the book icon and read a transcript of my voiceover.

Course Assessment

This has some tests in a variety of formats that you can pit your wits against.

Discussion Board

This is to simulate real classroom conditions where you can ask questions and receive and or give answers.

I would also appreciate if you

would give us some feedback on your reaction to this introductory course on e-learning and how e-learning might be of use to you in the future.

I wish you well in your adventure as you navigate your way through the joys of e-learning. I hope that you have as much fun e-learning as I have had writing these articles. Next month another of my colleagues will be assuming the role of magazine journalist when he assumes my membership of the NUJ. It would not be fitting for me to finish my five minutes of fame without acknowledging the help of my departmental colleagues, especially our Learning Technology Team, without whom the introductory e-learning course would not have been possible. Thank you all for reading, God bless!

Book Now!



et al.: BS News



THE FUTURE OF LIGHTING IN THE WORKPLACE

International Symposium on Workplace Lighting

Presented by

The Society of Light & Lighting

<u>VENUE:</u>	DIT Kevin Street, Dublin 8
<u>DATES:</u>	1 April to 3 April 2004
<u>TIMES:</u>	Thursday — 11am to 5.30pm Friday — 9.30am to 5.30pm Saturday — 9.30am to Noon

Synopsis of Symposium

The Society of Light and Lighting (SLL) together with the Lighting Industry Federation (LIF) and Sustainable Energy Ireland (SEI) invites you to take part in this International Symposium to discuss Lighting in the Workplace. This is your opportunity to discuss and debate all the issues concerning how we specify, procure and install Lighting in the Workplace. The Symposium will assist a task group set up by the Society of Light and Lighting (SLL) and the Lighting Industry Federation (LIF) to look at the question of how best to deliver advice through Lighting Guides and Codes. The Organising Committee invites you to participate and looks forward to meeting you.

Technical Symposium only

- (a) SLL, CIBSE Member and SLL Sustaining Member — €315
- (b) LIF Member — €315
- (c) CIE Delegate — €315
- (d) Non Member — €420

Technical Symposium and Dinner

- (e) SLL, CIBSE Member and SLL Sustaining Member — €385
- (f) LIF Member — €385
- (g) CIE Delegate — €385
- (h) Non Member — €490

Dinner Only

- (i) €105

Confirmation of Booking(s):

Name: _____
Company/Address: _____
Tel No: _____
Number of Places required: _____
Please circle option(s) above (a,b,c,d,e,f,g,h,i)
Amount of Cheque: _____

Cheques should be crossed and made payable to CIBSE, Republic of Ireland Region and sent with this booking form to:

Gerard Keating, SLL Representative, Homan O'Brien Associates,

Published by ARROW@TU.Dublin 2004
89 Booterstown Avenue, Blackrock, Co Dublin. Tel: 01 - 205 6300 Fax: 01 - 205 6301

SEDBUK Efficiency Rating System Only Way Forward

Band	SEDBUK Range
A	90% and above
B	86% — 90%
C	82% — 86%
D	78% — 82%
E	74% — 78%
F	70% — 74%
G	Below 70%

SEDBUK was developed under the UK Government's Energy Efficiency Best Practice Programme with the co-operation of boiler manufacturers to provide a basis for fair comparison of the energy performance of different boilers.

SEDBUK is the average annual efficiency achieved in typical domestic conditions, making reasonable assumptions about pattern of usage, climate, control, and other influences. It is calculated from the results of standard laboratory tests, together with other important factors such as boiler type, ignition arrangement, internal store size, fuel used, and knowledge of the prevailing climate and typical domestic usage patterns.

For estimating annual fuel costs SEDBUK is a better

guide than laboratory test results alone. It can be applied to most gas and oil domestic boilers for which data is available from tests conducted to the relevant European standards. The SEDBUK method is used in SAP.

SAP is the UK Government's standard methodology for home energy rating. SAP ratings allow comparisons of energy efficiency to be made, and can show the likely effect of improvements to a dwelling in terms of energy use. The UK Building Regulations require a SAP assessment to be carried out for all new dwellings and conversions. Local authorities, housing associations, and other landlords also use SAP ratings to estimate the energy efficiency of existing housing.

The SAP rating is based upon running costs for space- and

water-heating, which are calculated taking account of the shape and fabric of the building, its thermal insulation, the fuel used, and the performance of the heating system. SAP ratings are expressed on a range of 1 to 120, the higher the better. SAP also delivers a carbon index, in the range 0.0 to 10.0, to indicate carbon emissions.

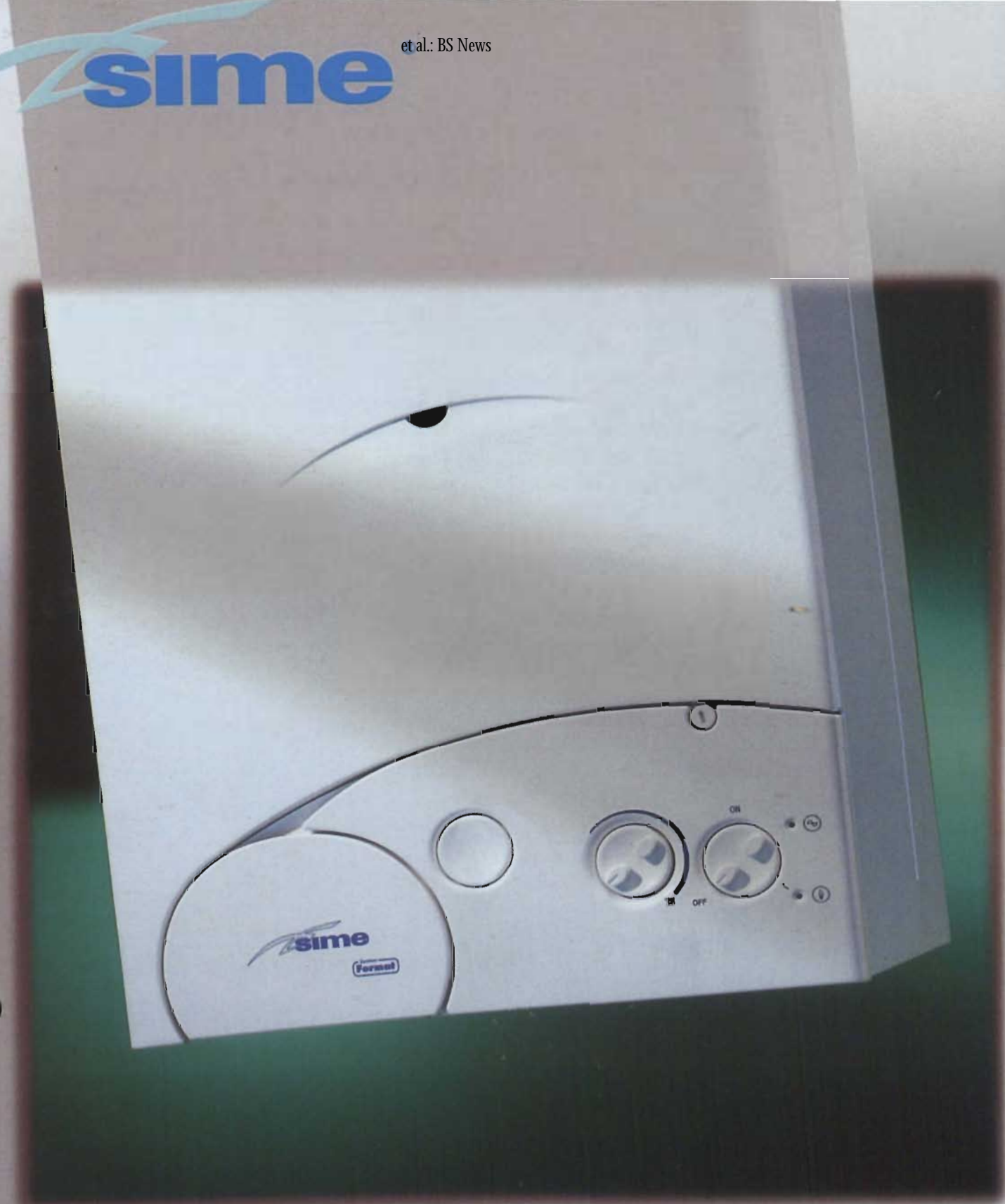
Using energy ratings, designers, developers, house-builders, and home owners can take energy efficiency factors into consideration, both when designing new dwellings and refurbishing existing ones. The UK Building Regulations require that every new dwelling be given a SAP energy rating, which must be displayed in the form of a notice.

As a simple guide to efficiency, a scheme has been created with SEDBUK efficiency bands assigned to boilers on an "A" to "G" scale (see panel). The band is shown in the database and may be used on product literature and labels, though there is no requirement for manufacturers to do so. The scheme is temporary as it will be withdrawn when a European Directive on boiler energy labelling is introduced.

Contact:
www.sedbuk.com

sime

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Wall hung gas boilers

Format System

Available in Natural Gas and LPG



Muirfield Drive, Naas Road, Dublin 12. Tel: 01 - 419 1919 Fax: 01 - 458 4806 email: info@hevac.ie

South Ring West Business Park, Tramore Road, Co Cork. Tel: 021 - 432 1066/7 Fax: 021 - 432 1068

Published by ARROW@TU Dublin, 2004

Hevac Multi Brand Strength

Hevac has always been to the forefront in domestic boilers in Ireland, pioneering the introduction of technological advancements and genuine product innovations by way of its association with market-leading brands. Today's portfolio is no exception, the Sime, Keston, Potterton Myson, and Vokèra ranges being a typical case in point. Taking Sime first, the Sime Format System and combination boilers are manufactured to the highest quality standards and has achieved all necessary accreditation and approvals.

Compact, reliable, efficient and economical, Format System and Combi boilers are fully modulating with two models ranging in outputs from 9kW to 23.4kW, and 11.5kW to 28.8kW for bigger homes. All have a built-in frost stat. All models have multi-directional telescopic flue but there is also a range of other flueing options to offer extra flexibility.

Format System and Combi boilers are easy to install and have the option of pre-fixing jig with spacing plate and plug-in electromechanical timer.

Sime Format System and Combi boilers are available in both natural gas and LPG models. Completing the line-up is the high-efficiency Keston range. The Keston Celsius 25 is a fully modulating gas condensing boiler with ultra-high efficiency of up to 90% and the ability to reduce energy costs by 30%. Being fully modulating, the one model is suitable for practically any size home.

For the Keston 25 a small diameter (50mm) muPVC standard kitchen wastepipe is all that is required for the flue and air intake. Flexibility is guaranteed as the flue can be extended up to 20m from the boiler, either vertically or horizontally.

In addition, the Keston DUET is designed to comply with Chess HR2 (2000) recommended best practice system specification.

Keston Boilers also provide a 38kW to 100kW range for larger domestic and commercial applications, together with a modular system for outputs of up to 400kW.

Contact: Karl Carrick, Hevac.
Tel: 01 - 419 1919;
email: karlc@hevac.ie



Keston Celsius 25 from Hevac



Potterton Performa



Vokèra Syntesi Synergy Boiler

BSNews

**Building
Services
Buyer Guide
2005/2006**

Entry forms
available shortly

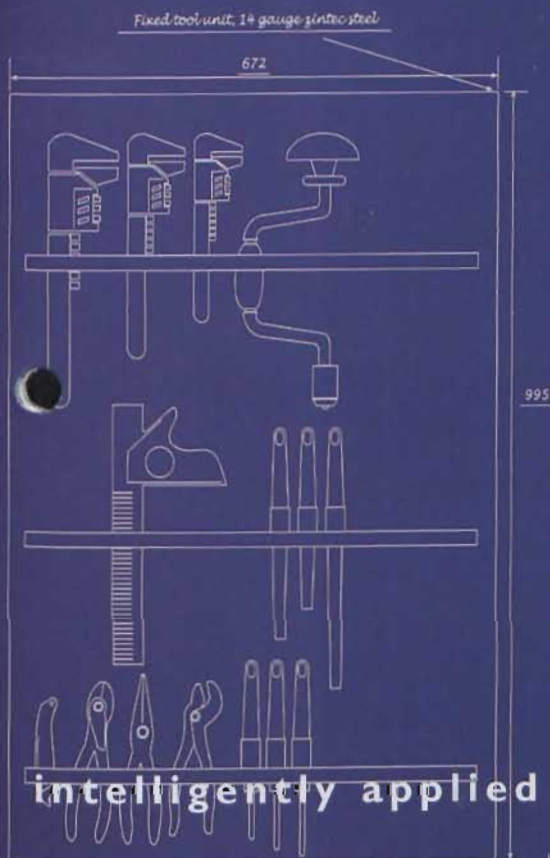
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to make sure you get
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Online version will
also be published

The Complete Boiler Range

et al.; BS News

Product Information
www.potterton.co.uk



POTTERTON

Potterton Suprima
Potterton Profile
Potterton Kingfisher
Potterton Osprey
Potterton Performa System
Potterton Performa Combi
Potterton Promax
Potterton Powermax
Potterton Statesman

Potterton Myson (Irl) Ltd
Belgard Road, Tallaght, Dublin 24

Tel: 01 - 459 0870 Fax: 01 - 459 0880 email: post@potterton-myson.ie

Published by ARROW@TU Dublin, 2004

www.potterton-myson.ie

Potterton –at the Forefront of Domestic Heating Technology

Generations of heating engineers and end users alike have long associated the Potterton name with top quality, high specification products that are easy to install and reliable in service. Founded over 150 years ago and with more than five million boilers installed, Potterton has entered the 21st century at the forefront of domestic heating technology as part of Europe's largest heating group.

All Potterton products benefit from world-class manufacturing skills and one of the largest and most experienced research and development teams in the industry. They are designed to be inherently reliable and to meet the most demanding user needs.

Potterton's aim to provide the very highest levels of customer satisfaction. Over many years in Ireland this has been achieved through a combination of quality

product, excellent after sales service, and a team of experienced engineers to back up the product on site and in telephone support to the installer. In addition, spare parts for current and past product offerings are readily available to the service engineers providing additional comfort to the end user.

The current product offerings reflect the tradition of quality and innovation that is best summarised in the expression "intelligently applied technology". The product ranges on offer are:

Potterton Suprima

A wall-mounted gas boiler, Suprima L offers a wide range of boilers from the same compact case size. The lightweight cast iron heat exchanger means low lift weights and ease of installation. The range covers all domestic applications while the larger model (35kW) can be linked to power larger properties;

Potterton Profile

Profile L offers a proven solution for applications where a wall-hung cast iron boiler is required in a wide range of outputs. It is especially suitable for potentially troublesome replacement applications on older systems;

Potterton Osprey

The Potterton Osprey 2 CFL floor standing gas boiler range is one of the most reliable on the

market and complies with all relevant Building regulations requirements;

Potterton Performa System

The Performa System range comprises gas fired, wall mounted system boilers combining elegant designs with sophisticated electronic monitoring and controls. There are four models available — Performa System 12e for the starter home; Performa System 18e for the average-sized home; Performa System 24e for larger homes; and Performa System 28e for substantial homes.

Potterton Promax

The Promax wall mounted high efficiency boiler range features the very latest in heat exchanger technology. There is also a revolutionary ceramic burner and an advanced micro-processor which enables up to 19% more heat to be drawn from the same amount of fuel used in a standard efficiency appliance. Its A Class SEDBUK rating means the lowest possible running costs;

Potterton Powermax

The Powermax HE is the first of the next generation of solutions to domestic central heating and hot water problems. It is a high efficiency central heating and unvented hot water appliance which exceeds all the latest performance, efficiency and environmental requirements;

Potterton Performa Combi

There are three models in the Potterton Performa wall mounted combination gas boiler range — the Performa 24 for starter and smaller homes; Performa 28 for most heating and domestic hot water requirements; and Performa 28i which provides near instantaneous domestic hot water by means of a compact on-board vessel (within 8 seconds for 35°C rise @7 l/m);

Potterton Kingfisher

Kingfisher Mf L is a flue standing gas boiler range. Its fanned-flue design complies with the strictest requirements of the Building Regulations. In CF L mode it offers adjustable flue positioning to more easily marry up to existing flues. All models are the same compact size — 290mm wide;

Potterton Statesman

The Statesman L range of floor standing oil boilers offers solutions for most oil boiler requirements and provides state-of-the-art design, excellent performance, reliability and ease of installation.

Potterton Commercial

Potterton Myson Ireland has also re-introduced the Potterton Commercial range. This includes the latest generation high-efficiency floor and wall mounted models, with outputs from 40kW to 2500kW.

Contact: Potterton Myson (Ire).

Tel: 01 - 459 0870;

email:

post@pottertonmyson.ie

www.potterton-myson.ie



Potterton Performa gas fired, wall mounted, combination boiler come in three models — Performa 28i; Performa 28 and Performa 24

WALL-HUNG SYSTEM

- Built-in adjustable by-pass;
- Built-in anti-seizing device for pump;
- Built-in expansion vessel;
- Built-in anti-frost device;
- Pre-installation jig and copper tails included



Britony System II & Britony System II Plus

System boilers
24 & 28 kW outputs

Precision Heating Ltd.

Unit 19 Airways Industrial Estate,
Swords Road, Dublin 17

Tel: 01 - 842 8763 Fax: 01 - 842 8820

email: info@precisionheating.ie

www.chaffoteaux.co.uk

Britony System II & System II Plus From Chaffoteaux & Maury

The introduction of a new range of Chaffoteaux & Maury system boilers by Precision Heating has enabled the latest refinements of 21st century design and technology to be applied to the Britony System II series.

It also ensures that the Britony II Plus models, as part of an all-inclusive package coupled with the new Hydraflo unvented cylinders, offer a perfectly-matched engineered solution for all sizes of domestic hot water requirements. Additionally, the Britony system boiler range has an extraordinary flexible flue system, with boilers being able to be installed with flue lengths up to 30m.

These sealed system appliances, incorporating the by-pass, expansion vessel and pump within the boiler casing, while producing hot water in conjunction with an external storage cylinder, are an increasingly important option for customers, according to Alan Hogan of Precision. "When traditional methods of water heating with storage are preferred, we find the installation convenience and economic benefits of the 'sealed system' concept are now widely appreciated by both installers and consumers alike. This in turn provides customers with all the benefits of one-stop shopping — a multi-component system from a single manufacturer and

thereafter a single point of service."

Both versions of this room-sealed, fan-assisted, balanced-flue appliance are now available with outputs of 24kW and 28kW and have improved SEDBUK ratings in line with the new Part L1 (Part J in Scotland) of the Building Regulations.

High efficiency design features include low water content, very responsive copper heat exchanger, electronic ignition and a thermistor for accurate control of the flow temperature.

Compact dimensions and the new-look contemporary fascia styling make it compatible with fitted kitchen furniture, and front access to all components beneath the simple-to-remove lightweight single-piece casing allows for ease of servicing. The user-friendly single control panel incorporates all the essential boiler controls.

Britony System II Applications

The new Britony System II boiler can be linked in with any type of hot water system — whether a traditional open-vented storage system or mains pressure unvented system — when savings can be made on pipework, and tanks can be kept out of the loft.

Britony System II appliances can also be used with any control pack of the installer's choice and offers a genuinely flexible approach to boiler change

with minimal disruption at relatively low cost for refurbishment contracts.

Britony System II Plus Applications

The Britony System II Plus version is part of a compatible package in which the heating appliance and the Hydraflo unvented cylinder have been designed to work in tandem by utilising a built-in changeover valve to provide the best possible system performance and efficiency.

In addition, the power of the Hydraflo coil has been designed to optimise the power of the boiler. The integral 3-port valve within the Britony System II Plus eliminates the need for a separate 2-port central heating valve when matched to an appropriately-sized Hydraflo cylinder, making for simpler pipework and therefore faster installation.

Application Benefits in Common

Furthermore, the suitability of this range for both new and replacement projects is enhanced by the flueing options, accessories and spares that are compatible throughout the Britony range to accommodate virtually every installation requirement.

In common with other C&M boilers, optimum siting flexibility is afforded by the availability of multiple flue options, including twin pipe (biflux), optional 45° and 90° bends and various terminals.

Fitting the boilers is made even easier by the provision of a template and removable fixing bracket which allows gas, water and electrical connections to be made prior to wall-mounting the appliance. Also supplied is a pressure test jig for sealing pipework and checking for leaks, and a complete set of pipe tails for installation convenience. A cross-over pipework kit to assist with replacement installations can also be provided.

All Britony boilers carry the CE Mark, are ISO9001 accredited, and have all relevant safety approvals. The standard warranty on the new Britony System boiler can be extended to two years at the time of installation and renewed annually thereafter, for a competitive premium, with the Chaffoteaux "ExtraCover" Scheme.

Contact: Alan Hogan, Precision Heating.
Tel: 01 - 842 8763;
email: ahogan@precisionheating.ie



Britony System series from Precision Heating

Last month the IDHE held a major event in Morans Red Cow Hotel, Dublin, at which IDHE Fellowships were



Alan Hogan, Precision Heating, spoke about renewable energy resources and the importance of sustainability



Xavier Dubuisson, Sustainable Energy Ireland, who also covered the topic of renewable resources, with particular emphasis on carbon taxes

What Excellent Fellows!

awarded to long-standing servants of the Institute; Diploma Certificates were presented to graduates of the IDHE course run in conjunction with the DIT; and two technical papers were delivered on solar and sustainable energy resources.

Joe Newman was master of ceremonies for the evening with IDHE Chairman Jimmy Hamilton and Seamus Murran, Head of the Department of Construction Skills, DIT, also officiating. The evening proved extremely successful, the all-embracing content attracting a large turnout.

The voucher for top student went to Anthony Butler while the IDHE Fellowships presented were to Eamon McGlade, Kevin Farrelly, Dave Harris and Declan Halpin.

Alan Hogan of Precision Heating and Xavier Dubuisson of Sustainable Energy Ireland gave the technical presentations.



IDHE Fellowship recipients Eamon McGlade, Declan Halpin and Kevin Farrelly. Dave Harris was also awarded a Fellowship but was unable to attend on the evening



Shane Maguire with James Curtin, John O'Heaire, Séamus Murran, Head of the Department of Construction Skills, DIT, Anthony Butler, Patrick Spaine, and John Smartt, Institute of Plumbing and DIT



Joe Newman, IDHE with Jimmy Hamilton, IDHE Chairman and Kevin Farrelly, REGII



Jimmy Hamilton with Alan Hogan, Precision Heating presenting Anthony Butler with the Top Student Award voucher

Register of Environmental Gas Installers

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Quality Does Not Cost ... It Pays!

To gain a competitive advantage in today's marketplace contractors should focus on quality. This has the potential to enhance business profitability in two ways — it will increase revenues by enhancing the service provided which in turn will lead to more business by way of referrals from satisfied customers.

A clear focus on quality will also have a significant impact on cost structures. "Doing it right first time" usually represents significant cost savings and is one of the best ways there is to increase productivity. By generating internal efficiencies installers can reduce waste, save on raw materials and, most important of all, save on the key resource of time management.

Quality is also a way of communicating a positive message about the industry at large. Applying recognised quality standards tells customers that staff are properly trained and that the business has a proven capability. Over the past number of years

there has been considerable emphasis on the "hard" side of quality — the establishment of clearly-documented standards, procedures, and certification.

As far as possible, the formality of any quality system should be in proportion to the size and nature of the individual company. If you invest in quality, it will deliver real value to the business.

In embarking on the quality route, first determine that you have the correct practices and procedures in place to ensure the efficient delivery of quality throughout all aspects of the service provided. With these structures and management personnel in place, you can then focus on the documentation and certification procedures.

In looking at quality do not overlook the "soft" side of the business. Remember, it is very much a people-oriented industry, you are in people's homes and dealing with their comfort levels and lifestyle. Hard skills may show what your business is capable of but it is the soft skills which demonstrate that you are capable of delivering it. The vast bulk of

Remember, You Are Now a Businessman

domestic contractors/installers in Ireland are first and foremost tradesmen. In most instances they became self-employed by circumstance or through choice but, what they all had in common once they made that break is that they went from being employees to businessmen. Like it or not, domestic contracting is not just a job ... it is about running a business.

Many of the problems facing the sector at the moment stem directly from the fact that, however qualified and skilled a contractor might be, it does not necessarily equip him to run a business. Far too many excellent tradesmen fail to realise this. A reality check may now be required. Do you recognise that your role has changed? ... do you understand your new responsibilities? ... if so, are you equipped to competently carry them out?

Successfully running a heating and plumbing business requires skills that you may not have. In that case you can either educate yourself or, alternatively, employ someone to do the job. The latter may not be an option if the scale of the business cannot support such a senior management

appointee who does not also work on the tools.

Do you constantly have to deal with some, or all, of the following?:—

- Bad cash flow ... never enough money;
- Habitually working late in the evenings and weekends;
- Feast and famine fluctuation in work and income;
- Never having enough, no matter how hard you work;
- Stress of having to argue your case to get paid for extras with "always changing their minds" customers;
- Always struggling to finance the next big job;
- Feeling "stuck in a rut" or "burnt-out";
- Difficulties in getting and managing good employees;
- Always behind with paperwork;
- Never enough time to do anything really well.

If so, then you are too busy being busy to be successful. It's like putting the cart before the horse and is the cause of much pain, confusion, and the kinds of difficulties listed above. You need to take time out to re-assess your business, to plan a strategy, and to implement a management structure designed to deliver that objective. Remember, success is seldom an accident.



CER
Commission for Energy Regulation
An Commission um Rialail Eilimneach

Mandatory Registration of Gas Installers By 2005

The Commission for Energy Regulation (CER) assumed its responsibilities and functions for the regulation of the Irish onshore natural gas market under the Gas (Interim) (Regulation) Act, 2002. Under the Act, the Commission and the Minister for Communications, Marine and Natural Resources, are both required to have regard to the need to promote safety and efficiency on the part of natural gas undertakings.

To date, the regulatory framework for natural gas safety in Ireland has been successfully managed. However, as the market changes (through the introduction of competition with regard to the supply and transportation of gas), it is recognised that there is a clear need to revisit the framework and ensure that an appropriate regulatory regime for the changed environment is put in place.

The Department for Communications, Marine and Natural Resources is currently preparing new legislation which will address the safety regulation framework in light of present and expected changes within the Irish gas market. The Department expects to consult on the new legislation with interested parties shortly, and that the legislation will be enacted in early 2005. An important part of the safety regulation framework will be the regulation of gas installers and fitters.

Currently, Bord Gáis Éireann has a voluntary scheme for the registration of gas installers.

The scheme has had some degree of success in promoting safety within the industry. However, given its voluntary nature and lack of a statutory footing, it is intended to replace this scheme with a mandatory registration scheme which will be administered by an independent body.

The Commission has carried out some research in to what is involved in a registration scheme and has met with CORGI, the body charged with administering a registration scheme in the UK. The Commission has also been involved in a similar registration scheme for electrical contractors.

The Commission will be meeting with the Registered Environmental Gas Installers of Ireland, a newly-formed gas installers' representative body, in the coming weeks. Once the necessary legislation is in place, the Commission will initiate a consultation process involving all the relevant participants with the view to putting in place a detailed framework for the regulation of gas installers.

For more information on the Commission and the work it undertakes, visit www.cer.ie, where you can add your contact details to the CER mailing list.





Cutting Facilities Management? — Be Careful!



Ann Sheehy, MMII MIPFMA,

**is Marketing &
Communications
Manager**

with Irish Estates.

Tel: 01 - 704 1400

www.irishestates.ie

Kathleen Broderick, Operations Services Manager, ABN Amro, recently asked why cost-cutting in the area of FM isn't always a good idea. *BSNews* asked Ann Sheehy, Marketing & Communications Manager with Irish Estates, for her views.

While some of her comments relate directly to specific businesses, they are used as examples to illustrate the various critical points which have universal relevance for virtually every business sector.

Ann writes:

Although facilities managers spend their lives trying to keep expenditure under control, there is a strong case for not cutting back too severely where your

premises are concerned. So, why should you spend money on your facilities? After all, they only affect those who work in the building ... don't they? Wrong! Your facilities speak volumes about your organisation to everyone who walks in and out of your building, be it customers, visitors, employees or contractors.

We all remember clearly the building that smelt of stale cigarettes, was cold and dirty, had paint peeling off the walls, a dead plant in the corner, and where the "receptionist" was a surly security guard in a uniform that was obviously issued the day he started ... 30 years ago! Wasn't he the guy who told you to use the lift but it was out of order and you had to climb four storeys in the dark? Not an experience you forget easily.

Cleanliness and maintenance issues may seem very mundane but a good clean and a painting touch-up can do wonders to restore a building; not to mention the value of designating someone to ensure that essential equipment is maintained, plants are watered, and that bulbs are replaced when they blow.

The very style and layout you choose for your building — we marketers call it your servicescape — says more about your company in seconds than volumes of brochures, web sites or publicity stunts.

Remember that your customer is likely to have found your premises through other forms of marketing by your company, such as an advert in the *Golden Pages*, a flyer received in the post, your web

site, or a brochure. This marketing will have conveyed an image that made them want to visit you ... your facilities should not let you down.

Ideally, your premises should speak the same brand message and should form part of your overall marketing just as your vehicles, your signage and your people do.

Your choice of furnishings will quickly tell someone if they are welcome to stay a while and chat or if they are expected to move along quickly. Take for instance the warm and cosy reception area that has comfortable seating, a plush carpet, hot coffee, and magazines for visitors to read. Compare this to the building that has no seating, high counters, screens, and is slightly cold. Visitors quickly get the message that they must do their business and leave ... Garda stations would be an example.

What you choose for your reception area tells people about the nature of your business and frequently your culture. For instance, have you used smart navies and blacks, gold-framed paintings; are your qualifications hanging on the walls; are the lights subtle? This suggests a professional service provider.

If your choice of colour scheme is bright reds, yellows, greens and blues and you have used a lot of synthetic, easy-to-clean surfaces, vinyl-painted walls and bright lights, then perhaps your business is a creche.

What are your heating levels like? Too hot and your visitors fall asleep, too cold and they'll be counting every second they are left waiting. How does the place smell? What sounds do

your visitors here while they wait? It should not be one of your staff on the phone losing his patience with a customer!

Is your business one where you must make an excellent first impression so that your visitors not only come back themselves, but will encourage their friends to visit you too? Perhaps your business is a restaurant or a hotel.

Can they watch what you're doing for them while they wait, like at the NCT Centre, or the sandwich bar? Are you that confident about your processes that you are willing to let your customers see what you do?

This element is very important for service-based businesses as they have no tangible product that customers see, feel, smell, taste or hear. Statistics show that customers who can watch your processes while they wait perceive their waiting time to have been far less than those left with nothing to occupy their minds while they wait.

Of course there are many processes that are simply not suitable for public viewing as they may be disturbing to your customers and in these cases it is vital to provide distractions, soothing music, suitable reading material, even goldfish tanks.

Naturally, the servicescape doesn't only serve the needs of visitors, it must also serve the needs of employees and indeed contractors and delivery people. Has your building been designed to allow for the easy removal of waste for instance? Can your contractors easily gain access to plant in order to service your installations? Do you have suitable and adequate parking for contractors and deliveries? Have your employees access to kitchens, toilets, office services and each other?

It is vital that lifts, lights and



This an excellent example of a good reception/waiting area

phone systems are in working order so that employees can do their jobs. If the desks are too close together, perhaps June can't hear on the phone because Denis has a particularly loud voice. If the heating is too hot or too cold, or if the light is flickering over their desk, employees will complain. It costs a lot to recruit and train staff ... don't lose them because their environment hampers them from performing as well as they want to.

Refurbishment projects present an ideal opportunity to re-organise your servicescape to meet the needs of those concerned. Perhaps in your reception area visitors' needs will be of paramount importance but, if it is a restaurant, you will only need to consider the needs of your staff and maintenance personnel when re-designing the kitchen area.

A little research carried out among potential space users, together with the advice of a good Facilities Manager, can go a long way to making sure that you end up with a servicescape that meets the needs of all concerned and still echoes your company's values and culture.



How many times have you seen this or something similar when visiting a company's premises



Pressure Equipment Directive (PED) Has Major Impact

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The Pressure Equipment Directive (97/23/EC) was adopted by the European Parliament and the European Council in May 1997. It initially came into force on 29 November 1999 and, from that date until 28 May 2002, manufacturers had a choice between applying the pressure equipment directive or continuing with the application of the existing national legislation. From 29 May 2002 the Pressure Equipment Directive (PED) became obligatory throughout the EU.

The introduction of the new legislation — along with further proposed statutory requirements — concerns a large number of industries, ranging from small and middle-sized manufacturers to the big chemical industries. It has particular relevance for the refrigeration and air conditioning sectors, and especially those whose everyday work involves installing and refrigeration equipment.

Hence then the massive turnout at the recent Refrigeration Technology Skillnet technical seminar on PED held in Dublin. Over 100 senior management personnel

and engineers attended, the detail of the questions asked and the intensity of the interest reflecting serious concern as to how to achieve full compliance with the Directive's requirements.

The aim of the seminar was to increase the understanding of PED; assess its impact on the refrigeration industry; classify items and assemblies under PED; and to demonstrate how equipment meets the essential safety requirements.

The first presentation was by Jim Hockenhull of Royal SunAlliance (Notified Body), an acknowledged authority on PED.

John Ellis, President, British Institute of Refrigeration, delivered the second paper and he covered the proposed changes to European Standard EN378.

Given the serious implications of PED — and its complexity — *BSNews* will run a series of articles on the Directive and other impending legislation, in association with Refrigeration Technology Skillnet, over the coming months.

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Speakers — John Ellis, Ellis Training & Consultancy (left) and Jim Hockenhull, Royal SunAlliance (right)



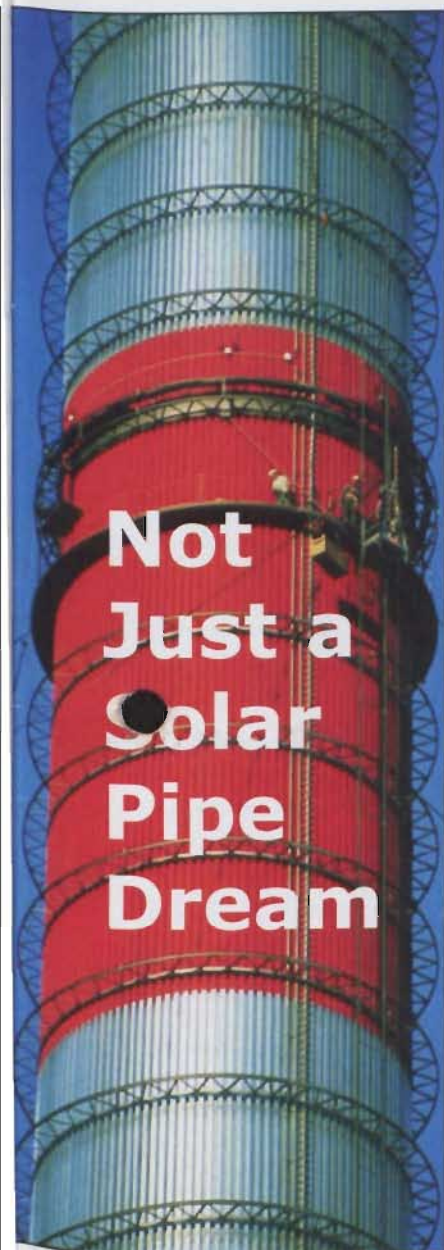
Nick O'Callaghan with Gerry Friory both from Purcell Refrigeration



Garrett Keenaghan, DIT with John Sampson, Danfoss Ireland and Séamus Kerr, RSL (Ireland) and Chairman, Refrigeration Technology Skillnet



Séamus Murrán, Head of the Department of Construction Skills, DIT with John Smartt, Institute of Plumbing and DIT



Not Just a Solar Pipe Dream

Want cheap, green electricity? The Australians have a simple answer. First, build a 20,000-acre greenhouse (with a 4.5 mile circumference) to trap and heat air. Then build a colossal tower 1 km (.62 miles) tall in the middle of it. The tower would be almost twice as high as the world's tallest structure, the CN communications tower in Toronto, which stands at 553.33 metres. It would be visible at up to 60 miles away.

The warm air from the greenhouse will rise

through the tower as it would through a chimney, turning turbines and generating enough electricity to power 200,000 Australian homes. It may sound like science fiction, but the project is on track and already has Australian government approval. If completed, the \$800 million solar tower will be the tallest man-made structure in the world.

Proposed by a company called EnviroMission, this world-first Solar Tower power station development will be located in New South Wales. "Support from governments is essential to renewable energy development and investments in more ways than one; the environment and future generations are the real winners when governments support renewable energy development," said EnviroMission's Chief Executive, Roger Davey. Solar Tower technology represents the largest non-hydro embedded renewable energy generation opportunity ever presented in Australia. It will generate enough clean power for around 200,000 households, this energy output representing an annual saving of more than 750,000 tonnes of greenhouse CO₂ gases from entering the environment.

Based on energy to be generated from turbines driven by large volumes of solar-heated air, the Solar Tower concept will use simple proven principals of physics to achieve reliable and

much-needed renewable energy.

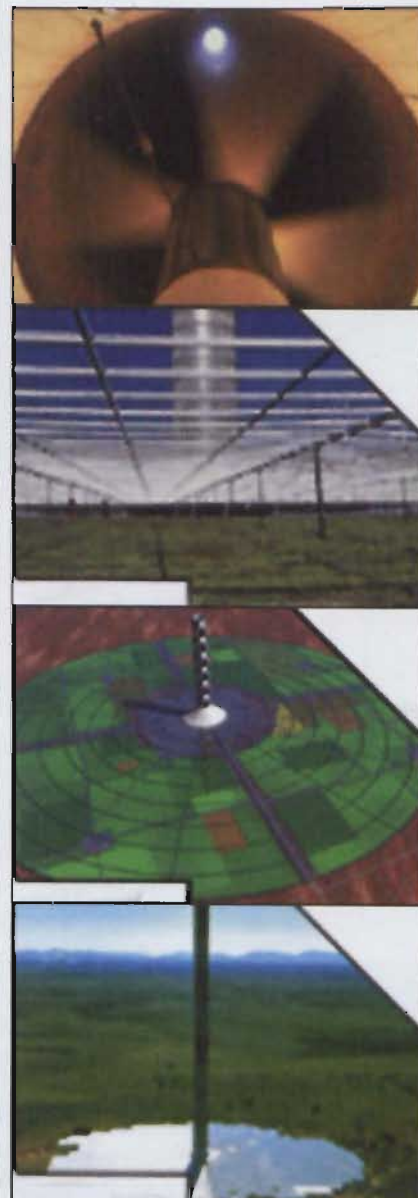
The monolithic size of the first 200MW power station will capture worldwide attention and attract significant added value through tourism and associated economic benefits to the power station's local region. This will include tourists wanting to visit the site and view the surrounding district from atop the tower; farmers growing crops under the greenhouse's canopy; and telecommunications companies using the tower for transmissions.

The sun's radiation is used to heat a large body of air, which is then forced by the laws of physics (hot air rises) to move as a hot wind through large turbines to generate electricity. A solar thermal power station using Solar Tower technology will create the conditions to cause hot wind to flow continuously through its turbines to generate electricity.

Solar Tower technology has been tested and proven with a successful pilot plant constructed in Manzanares Spain. The pilot project was the result of collaboration between the Spanish Government and the German designers, Schlaich Bergermann and Partner. The plant operated for seven years between 1982 and 1989, and consistently generated 50kW output of green energy.

Schlaich Bergermann and Partner will collaborate on the Australian project to provide the engineering

input for the scale up of the technology to Australian conditions and requirements. Australia is the ideal location for a solar thermal power station. It boasts the high solar radiation levels required to power a solar thermal power station, and offers geological stability and low land costs with many suitable terrains. A range of suitable high-solar radiation sites are also located close to electricity grids necessary to transmit the peak electricity loads a solar thermal power station will produce.



Plumb Lines

Heard it on the grapevine ...



INTRODUCING ... TK JUNIOR — Can you believe it, **Ciaran King** a daddy? Congratulations Audrey (and I suppose Ciaran had something to do with it as well!). TK Junior emerged into the world last month as a **bouncing 7.2lb boy** with a fine head of black hair and a nose like his dad's. Our spy on the occasion took this photograph on her 'phone. Thanks **Joanne**.



WELCOME BACK CHARLES — Nice to see Charles Billings fully back in harness. Now New Business Development Manager for Vokera Ireland, Charles is renewing old acquaintances and **friendships**. When I met him recently he said he was thrilled to be back actively involved in the business, and he asked me to acknowledge and **thank all** those who were so supportive when he was unwell.

YOU SPEAK ITALIAN? Did anyone stay in Ireland last month or was everyone in Milan? Can't wait to see what everyone has brought back.

SMARTMIRROR — One of the more bizarre items I came across at Mostra Convegno was the **SmartMirror**. It is a bathroom mirror combined with a digital imaging device which creates a daily record of your face, allowing you to track **changes over time** and recall how you appeared on specific dates. The mind boggles! Moreover, with the "creativity" shown by **irresponsible** picture 'phone users recently, I dread to think what you could end up looking at first thing in the morning ... perhaps **it's best not** to think about it.

PREMIER GUARANTEE Now nearly two years up and running, Premier Guarantee — the only alternative to Homebond in Ireland — has proved that competition does indeed work. For far too long the construction industry was at the mercy of Homebond ... now Premier Guarantee from Coyle Hamilton has proven itself a viable, reliable alternative.

SANYO HI-FI WINNER! Congratulations to **Gillian Mooney** of PMC Partnership in Dublin. Gillian correctly answered all the questions in the **BSNews Sanyo Reader Competition** in the February issue. To claim your prize Gillian please 'phone Louise at **Tel: 01 - 288 5001**.

Eco House Wow! — If you missed the Eco House at the Spring House & Garden Show in the **RDS** earlier this month, you really should get the details from Expo Exhibitions. Architect **John Goulding** designed an amazing Eco House incorporating all manner of eco-friendly and sustainable features and products. Check out the details at www.expo-events.com

Great Scott!!!



Came across this wonderful picture of **Tom Scott** in a back-issue of **BSNews** recently. The year it was taken was 1966 and it was during **Tom's Army days** — he was not always with Hevac you know, it just seems like that. It was also before he gave up **energetic sports** for the more leisurely pursuit of trying to hit a little white ball into a hole.

RSL Keeps on Trucking



Down in Cork recently I came across this brand new 04 reg truck with the RSL livery clearly displayed. Gerry McDonaghs tells me that the new vehicle was put on the road to better service the company's ever-expanding client base in the region.

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Complete Solutions

Building Services News, Vol. 43, Iss. 3 [2004], Art. 1

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- AFRISO measuring devices cover the following ranges:

Pressure: from 0/4 mbar to 0/4.000 bar

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